REMARKS

This Amendment is responsive to the Office Action mailed February 27, 2008. With this Amendment, claims 1-2, 7, 9-16, and 20 are cancelled; claims 3-6, 8, and 17-19 are amended; and claims 21-32 are added. Claims 3-6, 8, 17-19 and 21-32 are pending. Applicants submit that claims 21-32 are examinable along with the elected subject matter.

Support for the amendments to the claims can be found throughout the specification and claims as filed, including, e.g., original claims 1-2 and 4-6; page 1, paragraph [0002] (especially lines 16-18); page 4, paragraphs [0010] – [0011]; paragraph [0014] bridging pages 5-6; and pages 9-10, paragraph [0023] (especially lines 11-15 of page 10).

Information Disclosure Statement

Applicants thank the Examiner for considering the Information Disclosure Statement filed on March 28, 2007, and for indicated such consideration with an initialed notation at the bottom of the document stating that all references were considered except where lined through.

Priority

Applicants also thank the Examiner for acknowledging receipt of the certified copy of the foreign priority application.

Claim Rejections – 35 U.S.C. § 102

The Office Action rejects claims 1-20 under 35 U.S.C. § 102(e) as allegedly anticipated by Shidoji et al. (U.S. Patent Application Pub. No. US 2005/0250671; hereinafter SHIDOJI).

In particular, the Office Action states that SHIDOJI teaches the polyprenyl acyclic compounds encompassed by the claims, including 3,7,11,15-tetramethyl-2,4,6,10,14-hexadecapentanoic acid and (2E,4E,6E,10E)-3,7,11,15-tetramethyl-2,4,6,10,14-hexadecapentanoic acid. The Office Action also states that the terms "a pharmaceutical composition containing a pharmaceutically acceptable additive for formulation together with an acyclic polyprenyl compound as an active ingredient" and "a pharmaceutical composition for oral administration" as recited in the claims are reasonably construed to be satisfied by the teaching of SHIDOJI of medicaments suitable for oral administration, wherein the desired pharmaceutical compositions can be prepared by using as pharmaceutical carriers, excipients such as lactose and glucose, disintegrants such as carboxymethycellulose calcium, lubricants such as calcium stearate, etc. The Office Action further states that the term "[a] medicament having an inhibitory action against activation of the transcription factor KLF5" overlaps with the disclosure of SHIDOJI of "medicaments comprising polyprenyl compounds that activate PPAR, including PPAR alpha or PPAR gamma as preferred targets (para 0021)."

In response, Applicants submit that the claimed invention is not anticipated by SHIDOJI. SHIDOJI discloses the use of polyprenyl compounds, including compositions which can be prepared using excipients, disintegrants, and lubricants as pharmaceutical carriers, as preferably applied to conditions including non-insulin dependent diabetes mellitus, hyperlipidemias, as well as complications of such diseases, including hyperinsulinemia (page 2, paragraph [0021]). In contrast, the presently claimed and disclosed subject matter is directed to a medicament having an inhibitory action against arteriosclerosis caused by vascular injury, the medicament comprising: an acyclic polyprenyl compound as an active ingredient, and a pharmaceutically acceptable additive.

With regard to the Office's assertion that the term "[a] medicament having an inhibitory action against activation of the transcription factor KLF5" overlaps with the disclosure of SHIDOJI of "medicaments comprising polyprenyl compounds that activate PPAR, including PPAR alpha or PPAR gamma as preferred targets," Applicants submit that that target molecule of the present invention, KLF5, is considered to participate in the formation of arteriosclerosis triggered by vascular injury, while PPARα mostly relates to the formation of atherosclerosis, and further that atherosclerosis is distinguishable from arteriosclerosis triggered by physical vascular damage, especially vascular damage which is due to vascular reconstructive surgery for coronary arteries.

Applicants further submit that SHIDOJI fails to disclose methods of treatment for arteriosclerosis comprising administration of a medicament comprising an acyclic polyprenyl compound as an active ingredient. Neither does the SHIDOJI document disclose such methods wherein the arteriosclerosis is caused by vascular injury, or further wherein said vascular injury is caused by vascular reconstructive surgery for coronary arteries.

Finally, Applicants submit that SHIDOJI does not teach the specific combination of recited elements such that they comprise a treatment for arteriosclerosis caused by vascular injury. Neither does SHIDOJI teach the specific combination of recited elements such that they comprise such a treatment wherein the vascular injury is caused by vascular reconstructive surgery for coronary arteries.

Thus, based at least on the foregoing, Applicants submit that the disclosed and claimed subject matter is not anticipated or fairly suggested. Applicants therefore respectfully request withdrawal of the rejections under 35 U.S.C. § 102(e).

The Office Action also rejects claims 1-20 under 35 U.S.C. § 102(b) as allegedly anticipated by Muto et al. (U.S. Patent No. 5,852,057; hereinafter MUTO). In particular, the Office Action states that MUTO teaches 3,7,11,15-tetramethyl-2,4,6,10,14-hexadecapentanoic acid as a major component in an anticarcinogenic pharmaceutical composition. The Office Action also states that the term "an inhibitory action against activation of a transcription factor KLF5," the term "an inhibitory action against vascular remodeling," and the term "an inhibitory action against arteriosclerosis" as recited are reasonably construed to be inherent characteristics of the claimed composition."

In response, Applicants submit that the disclosed and claimed invention is not anticipated by MUTO. MUTO discloses an anticarcinogenic drug composition comprising 3,7,11,15-tetramethyl-2,4,6,10,14-hexadecapentanoic acid, which functions effectively to prevent the recurrence of hepatocellular carcinoma, as well as occurrence of cervical carcinoma, lung adenocarcinoma, and the like (column 2, lines 30-46). In contrast, the presently claimed and disclosed subject matter is directed to a medicament having an inhibitory action against arteriosclerosis caused by vascular injury, the medicament comprising: an acyclic polyprenyl compound as an active ingredient, and a pharmaceutically acceptable additive.

With regard to the Office's assertion that the terms "an inhibitory action against activation of a transcription factor KLF5," "an inhibitory action against vascular remodeling," and "an inhibitory action against arteriosclerosis" as recited are reasonably construed to be inherent characteristics of the claimed composition, Applicants submit that such terms are not reasonably construed to be inherent characteristics of the claimed composition at least because MUTO does not teach the specific combination of recited elements such that they comprise a

treatment for arteriosclerosis, especially arteriosclerosis caused by vascular injury. Neither does MUTO teach the specific combination of recited elements such that they comprise such a treatment wherein the vascular injury is caused by vascular reconstructive surgery for coronary arteries.

Applicants further submit that MUTO fails to disclose methods of treatment for arteriosclerosis comprising administration of a medicament comprising an acyclic polyprenyl compound as an active ingredient. Neither does the MUTO document disclose such methods wherein the arteriosclerosis is caused by vascular injury, or further wherein said vascular injury is caused by vascular reconstructive surgery for coronary arteries.

Based at least on the above, Applicants submit that the disclosed and claimed subject matter is not anticipated or fairly suggested. Applicants therefore respectfully request withdrawal of the rejections under 35 U.S.C. § 102(b).

CONCLUSION

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections of record, and allow all the pending claims.

No additional fee is believed due at this time. If, however, any additional fee is necessary to ensure consideration of the submitted materials, the Patent and Trademark Office is hereby authorized to charge the same to Deposit Account No. 19-0089.

Any comments or questions concerning this application can be directed to the undersigned at the telephone number given below.

Respectfully submitted,
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